



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/522,310	01/24/2005	Wolfgang Schulz	3178	5673

7590 05/03/2006

Striker Striker & Stenby  
103 East Neck Road  
Huntington, NY 11743

EXAMINER
----------

FRISTOE JR, JOHN K

ART UNIT	PAPER NUMBER
----------	--------------

3751

DATE MAILED: 05/03/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

C

<b>Office Action Summary</b>	<b>Application No.</b> 10/522,310	<b>Applicant(s)</b> SCHULZ ET AL	
	<b>Examiner</b> John K. Fristoe Jr.	<b>Art Unit</b> 3751	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 24 January 2005.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-10 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 24 January 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>1/24/2005</u> . | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Information Disclosure Statement***

1. The information disclosure statement filed 1/24/2005 is acknowledged by an examiner.

### ***Claim Objections***

2. Claim 1 is objected to because of the following informalities: "lement" in line 5 should be replaced with "element". Appropriate correction is required.

3. Claims 2-10 are objected to because of the following informalities: "Claim" should be replaced with "claim" in order to take out the capital letter recited in the claim. Appropriate correction is required.

### ***Claim Rejections - 35 USC § 112***

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. Claim 3 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claim 3 recites the limitation VITON in line 3. It is important to recognize that a trademark or trade name is used to identify a source of goods, and not the goods themselves. If a trademark or trade name is used in a claim as a limitation to identify or describe a particular material or product, then the claim does not comply with the requirements of 35 USC 112, second paragraph (see MPEP 2173.05(u)). The claim scope is uncertain since the trademark or trade name cannot be used properly to identify any particular material or product.

***Claim Rejections - 35 USC § 102***

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

7. Claims 1, 3 as far as it is definite, and 7-9 are rejected under 35 U.S.C. 102(e) as being anticipated by U.S. Pat. No. 6,935,612 (McCombs et al.). McCombs et al. disclose a valve for metering a fluid comprising a valve seat (30), a valve body (16), a sealing element (22), a damping element (38), wherein the sealing element (22) is made from a first elastomer (col.2, line 40), wherein the damping element (38) is made from a second elastomer (col. 2, line 60), wherein the second elastomer is VITON (col. 2, line 60), wherein the first elastomer (col. 2, line 40) and the second elastomer (col. 2, line 60) have a different Shore hardness, a metallic (col. 2, line 29) main body (12), and wherein the sealing element (22) and the damping element (38) are located (figure 3) on the main body (12).

Regarding the elements being “extruded” and “injection molded” recited in claim 9, the patentability of a product does not depend on its method of production. If the product in the product-by-process claim is the same as or obvious from a product in the prior art, the claim is unpatentable even though the prior product was made by a different process (see MPEP 2113).

***Claim Rejections - 35 USC § 103***

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

Art Unit: 3751

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Pat. No. 6,935,612 (McCombs et al.) in view of U.S. Pat. No. 5,529,841 (Neihof). McCombs et al. disclose a valve for metering a fluid comprising a valve seat (30), a valve body (16), a sealing element (22), a damping element (38), wherein the sealing element (22) is made from a first elastomer (col.2, line 40), wherein the damping element (38) is made from a second elastomer (col. 2, line 60), wherein the second elastomer is VITON (col. 2, line 60), wherein the first elastomer (col. 2, line 40) and the second elastomer (col. 2, line 60) have a different Shore hardness, a metallic (col. 2, line 29) main body (12), and wherein the sealing element (22) and the damping element (38) are located (figure 3) on the main body (12) but lacks the first or second elastomer being composed of a fluorosilicone and a silicone. Neihof teaches a barrier for sealing fluids comprising a fluorosilicone and a silicone (col. 4, lines 41-43). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify sealing and or damping elastomer of McCombs et al. by making them from a mixture of a fluorosilicone and a silicone as taught by Neihof in order to control their permeability and swelling which would effect the performance of the valve.

10. Claims 4-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Pat. No. 6,935,612 (McCombs et al.) in view of U.S. Pat. No. 5,529,841 (Neihof) as applied to claim 2 above, and further in view of engineering expedient. McCombs et al. modified above, disclose a valve for metering a fluid comprising a valve seat (30), a valve body (16), a sealing element (22), a damping element (38), wherein the sealing element (22) is made from a first elastomer (col.2,

Art Unit: 3751

line 40), wherein the damping element (38) is made from a second elastomer (col. 2, line 60), wherein the second elastomer is VITON (col. 2, line 60), wherein the first elastomer (col. 2, line 40) and the second elastomer (col. 2, line 60) have a different Shore hardness, a metallic (col. 2, line 29) main body (12), and wherein the sealing element (22) and the damping element (38) are located (figure 3) on the main body (12) but lacks a certain ratio or proportion of fluorosilicone to silicone. One of ordinary skill in the art of valve design would choose an elastomer having a certain ratio or proportion of fluorosilicone to silicone in order to either seal well enough to close the valve or damp well enough to inhibit damage of the valve body. It would have been obvious to one of ordinary skill in the art at the time the invention was made to further modify sealing and or damping elastomer of McCombs et al. by having a certain ratio or proportion of fluorosilicone to silicone in the sealing member or damping member as an engineering expedient in order to seal the valve more effectively in the closed position and to damp the valve well enough in order to prevent damage to the valve body.

11. Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Pat. No. 6,935,612 (McCombs et al.) in view of U.S. Pat. No. 5,718,264 (Sturman). McCombs et al. disclose a valve for metering a fluid comprising a valve seat (30), a valve body (16), a sealing element (22), a damping element (38), wherein the sealing element (22) is made from a first elastomer (col. 2, line 40), wherein the damping element (38) is made from a second elastomer (col. 2, line 60), wherein the second elastomer is VITON (col. 2, line 60), wherein the first elastomer (col. 2, line 40) and the second elastomer (col. 2, line 60) have a different Shore hardness, a metallic (col. 2, line 29) main body (12), a stop (14), and wherein the sealing element (22) and the damping element (38) are located (figure 3) on the main body (12) but lacks a

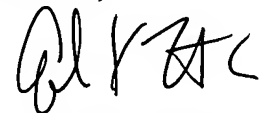
Art Unit: 3751

diaphragm element located on the side of the main body. Sturman teaches a valve assembly comprising a main body (52) and a diaphragm (54) connected to the main body (52). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the valve assembly of McCombs et al. by incorporating a diaphragm on the main body as taught by Sturman in order to seal the solenoid assembly from the fluids passing within the valve.

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to John K. Fristoe Jr. whose telephone number is (571) 272-4926. The examiner can normally be reached on Monday-Friday, 7: 00 a.m-4: 30 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Justine R. Yu can be reached on (571) 272-4835. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



John K. Fristoe Jr.  
Examiner  
Art Unit 3751

JKF



EDWARD K. LOOK  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 3700

5/1/06